



SEQUENCE LISTING

B1  
<110> Magdalena, J  
Supply, P  
Locht, C

<120> FRAGMENTS OF NUCLEIC ACIDS SPECIFIC TO MYCOBACTERIA  
WHICH ARE MEMBERS OF THE M. TUBERCULOSIS COMPLEX AND  
THEIR APPLICATIONS FOR THE DETECTION AND THE  
DIFFERENTIAL DIAGNOSIS OF MEMBERS OF THE M. TUBERC

<130> 408.014-CON

<140> 10/086,206

<141> 2002-02-28

<150> 09/242,588

<151> 1999-05-20

<150> PCT/FR97/01483

<151> 1997-08-12

<150> FR 96/10277

<151> 1996-08-19

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<170> PatentIn Ver. 2.1

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<213> Mycobacterium tuberculosis

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<213> Mycobacterium tuberculosis

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<210> 12

<211> 3208

<212> DNA

<213> Mycobacterium bovis

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<213> Mycobacterium tuberculosis

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atgaggtggg ggcaccaccc gcttgccggg gagagtggcg ctgatgacct gcgccgacga 180  
cgatgcagag cgtagcgatg aggaggagtg gcgctgatga ccagt 225

<210> 14  
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<212> PRT  
<213> Mycobacterium bovis BCG

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<223> Translation of ORF nucleotides 1525-1602 of SEQ ID  
NO:12.

<400> 14  
Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala  
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Pro Pro Ala Cys Gly Gly Glu Trp Arg  
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<210> 15  
<211> 25  
<212> PRT  
<213> Mycobacterium bovis BCG

<220>  
<223> Translation of ORF nucleotides 1602-1679 of SEQ ID  
NO:12.

<400> 15  
Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala  
1 5 10 15  
Pro Pro Ala Cys Gly Gly Glu Trp Arg  
20 25

<210> 16  
<211> 25  
<212> PRT

<213> Mycobacterium tuberculosis

<220>

<223> Translation of ORF nucleotides 10-87 of SEQ ID  
NO:13.

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Pro	Pro	Ala	Cys	Gly	Gly	Glu	Trp	Arg
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<210> 17

<211> 25

<212> PRT

<213> Mycobacterium tuberculosis

<220>

<223> Translation of ORF nucleotides 87-164 of SEQ ID  
NO:13.

<400> 17

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Pro	Pro	Ala	Cys	Gly	Gly	Glu	Trp	Arg
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<210> 18

<211> 17

<212> PRT

<213> Mycobacterium tuberculosis

<220>

<223> Translation of ORF nucleotides 164-217 of SEQ ID  
NO:13.

<400> 18

Met	Thr	Cys	Ala	Asp	Asp	Asp	Ala	Glu	Arg	Ser	Asp	Glu	Glu	Glu	Trp
1				5				10						15	

Arg

<210> 19  
<211> 39  
<212> PRT  
<213> Mycobacterium bovis

<220>  
<223> Translation of nucleotides 3-119 of SEQ ID NO:12,  
partial PgmY amino acid sequence.

<400> 19  
Ile Pro Leu Arg Tyr Asp Leu Asp Ser Ala Met Arg Pro Leu Val Arg  
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Gly Gly Thr Tyr Leu Asp Pro Glu Ala Ala Ala Ala Gly Ala Ala Ala  
20 25 30  
Val Ala Gly Gln Gly Arg Gly  
35

<210> 20  
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<212> PRT  
<213> Mycobacterium bovis

<220>  
<223> Translation of nucleotides 296-1528 of SEQ ID  
NO:12, SenX3 amino acid sequence.

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Ala Leu Ala Val Gly Gly Ala Val Gly Met Arg Leu Thr Ser Arg Val  
20 25 30  
Val Glu Gln Arg Gln Arg Val Ala Thr Glu Trp Ser Gly Ile Thr Val  
35 40 45  
Ser Gln Met Leu Gln Cys Ile Val Thr Leu Met Pro Leu Gly Ala Ala  
50 55 60  
Val Val Asp Thr His Arg Asp Val Val Tyr Leu Asn Glu Arg Ala Lys  
65 70 75 80  
Glu Leu Gly Leu Val Arg Asp Arg Gln Leu Asp Asp Gln Ala Trp Arg  
85 90 95

Ala	Ala	Arg	Gln	Ala	Leu	Gly	Gly	Glu	Asp	Val	Glu	Ser	Asp	Leu	Ser	100	105	110	
Pro	Arg	Lys	Arg	Ser	Ala	Thr	Gly	Arg	Ser	Gly	Leu	Ser	Val	His	Gly	115	120	125	
His	Ala	Arg	Leu	Leu	Ser	Glu	Glu	Asp	Arg	Arg	Phe	Ala	Val	Val	Phe	130	135	140	
Val	His	Asp	Gln	Ser	Asp	Tyr	Ala	Arg	Met	Glu	Ala	Ala	Arg	Arg	Asp	145	150	155	160
Phe	Val	Ala	Asn	Val	Ser	His	Glu	Leu	Lys	Thr	Pro	Val	Gly	Ala	Met	165	170	175	
Ala	Leu	Leu	Ala	Glu	Ala	Leu	Leu	Ala	Ser	Ala	Asp	Asp	Ser	Glu	Thr	180	185	190	
Val	Arg	Arg	Phe	Ala	Glu	Lys	Val	Leu	Ile	Glu	Ala	Asn	Arg	Leu	Gly	195	200	205	
Asp	Met	Val	Ala	Glu	Leu	Ile	Glu	Leu	Ser	Arg	Leu	Gln	Gly	Ala	Glu	210	215	220	
Arg	Leu	Pro	Asn	Met	Thr	Asp	Val	Asp	Val	Asp	Thr	Ile	Val	Ser	Glu	225	230	235	240
Ala	Ile	Ser	Arg	His	Lys	Val	Ala	Ala	Asp	Asn	Ala	Asp	Ile	Glu	Val	245	250	255	
Arg	Thr	Asp	Ala	Pro	Ser	Asn	Leu	Arg	Val	Leu	Gly	Asp	Gln	Thr	Leu	260	265	270	
Leu	Val	Thr	Ala	Leu	Ala	Asn	Leu	Val	Ser	Asn	Ala	Ile	Ala	Tyr	Ser	275	280	285	
Pro	Arg	Gly	Ser	Leu	Val	Ser	Ile	Ser	Arg	Arg	Arg	Arg	Gly	Ala	Asn	290	295	300	
Ile	Glu	Ile	Ala	Val	Thr	Asp	Arg	Gly	Ile	Gly	Ile	Ala	Pro	Glu	Asp	305	310	315	320
Gln	Glu	Arg	Val	Phe	Glu	Arg	Phe	Phe	Arg	Gly	Asp	Lys	Ala	Arg	Ser	325	330	335	
Arg	Ala	Thr	Gly	Gly	Ser	Gly	Leu	Gly	Leu	Ala	Ile	Val	Lys	His	Val	340	345	350	



Ala Ala Asn His Asp Gly Thr Ile Arg Val Trp Ser Lys Pro Gly Thr  
 355 360 365

Gly Ser Thr Phe Thr Leu Ala Leu Pro Ala Leu Ile Glu Ala Tyr His  
 370 375 380

Asp Asp Glu Arg Pro Glu Gln Ala Arg Glu Pro Glu Leu Arg Ser Asn  
 385 390 395 400

Arg Ser Gln Arg Glu Glu Glu Leu Ser Arg  
 405 410

<210> 21

<211> 227

<212> PRT

<213> Mycobacterium bovis

<220>

<223> Translation of nucleotides 1679-2362 of SEQ ID  
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Asp Gly Pro Ala Ala Leu Ala Glu Phe Asp Arg Ala Gly Ala Asp Ile  
 35 40 45

Val Leu Leu Asp Leu Met Leu Pro Gly Met Ser Gly Thr Asp Val Cys  
 50 55 60

Lys Gln Leu Arg Ala Arg Ser Ser Val Pro Val Ile Met Val Thr Ala  
 65 70 75 80

Arg Asp Ser Glu Ile Asp Lys Val Val Gly Leu Glu Leu Gly Ala Asp  
 85 90 95

Asp Tyr Val Thr Lys Pro Tyr Ser Ala Arg Glu Leu Ile Ala Arg Ile  
 100 105 110

Arg Ala Val Leu Arg Arg Gly Gly Asp Asp Asp Ser Glu Met Ser Asp  
 115 120 125

Gly Val Leu Glu Ser Gly Pro Val Arg Met Asp Val Glu Arg His Val

130

135

140

Val Ser Val Asn Gly Asp Thr Ile Thr Leu Pro Leu Lys Glu Phe Asp  
145 150 155 160

Leu Leu Glu Tyr Leu Met Arg Asn Ser Gly Arg Val Leu Thr Arg Gly  
165 170 175

B/ Gln Leu Ile Asp Arg Val Trp Gly Ala Asp Tyr Val Gly Asp Thr Lys  
180 185 190

Thr Leu Asp Val His Val Lys Arg Leu Arg Ser Lys Ile Glu Ala Asp  
195 200 205

Pro Ala Asn Pro Val His Leu Val Thr Val Arg Gly Leu Gly Tyr Lys  
210 215 220

Leu Glu Gly  
225

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